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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,867

10/21/2003

Gerard A. Esposito

TPS-007

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21323

7590

05/24/2004

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EXAMINER

NASRI, JAVAID H

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,867	ESPOSITO, GERARD A.	
	Examiner	Art Unit	
	Javaid Nasri	2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-16, 22-28, 34-40 and 46-48 is/are rejected.
- 7) ☒ Claim(s) 5-9, 17-21, 29-33 and 41-45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1021/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a) On page 4 in the "Brief description of the drawings" change "accord" to --
accordance --.
 - b) In the abstract line 3 change "accord" to -- accordance --

Note: These are few examples only. Applicant is required to check the entire disclosure and correct the disclosure accordingly.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26, 27 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Gordon et al. (4,752,109).

Gordon et al discloses an optical fiber (45); a transition bushing having a first section (55) and a second section (57), the first and second sections of the transition bushing having different physical properties (different shape), wherein the fiber is mounted in the transition bushing, solder joint (50), the transition bushing is mounted in a housing.

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4. Claims 26-28 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Paschke et al. (4,904,046).

Paschke et al discloses an optical fiber (3); a transition bushing (15) having a first section (barrel part, see figure 2) and a second section (flange part, see figure 2), the first and second sections of the transition bushing having different physical properties (different shape), wherein the fiber is mounted in the transition bushing, glass solder joint (see abstract), the transition bushing is mounted in a housing.

5. Claims 37 and 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashizume (5,631,990).

Hashizume discloses an optical fiber (31) mounted in a ferrule (32); a transition bushing (9) having a first section (barrel part, see figure 4) and a second section (flange part, see figure 4), the first and second sections of the transition bushings having different physical properties (different shape), wherein the ferrule is mounted in the transition bushing (see col 3, line 42+), bushing is mounted in a housing, laser welding (see col. 3, lines 8-20).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (4,752,109).

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Gordon et al discloses optical fiber (45), transition bushing first/second section (55, 57) with different physical properties (different shapes), metallized (49), bushing in housing,

However, in regard to method claims, the claimed method language is counter part of the apparatus claimed. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to develop a particular method for the disclosed apparatus of the cited references.

8. Claims 1-4, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paschke et al (4,904,046).

Paschke et al discloses optical fiber (3), transition bushing (15), first/second section (barrel part/flange part, see figure 2) with different physical properties (different shapes), metallized (known, see col. 1, lines 25+), bushing in housing, glass sealing (see abstract),

However, in regard to method claims, the claimed method language is counter part of the apparatus claimed. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to develop a particular method for the disclosed apparatus of the cited references.

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paschke et al (4,904,046) in view of Hashizume (5,631,990).

Paschke et al discloses all the limitations of claims 1 and 11, as shown above,

However, Paschke et al does not disclose.

- a) The bushing is mounted in the housing using laser welding. Hashizume disclose laser welding (see col.3, lines 8-20), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for

Paschke et al to have the bushing to be mounted in the housing using laser welding in view of Hashizume for better connections.

10. Claim 14, 15 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashizume (5,631,990).

Hashizume discloses an optical fiber (31) mounted in a ferrule (32); a transition bushing (9) having a first section (barrel part, see figure 4) and a second section (flange part, see figure 4), the first and second sections of the transition bushings having different physical properties (different shape), wherein the ferrule is mounted in the transition bushing (see col 3, line 42+), bushing mounted in a housing, laser welding (see col. 3, lines 8-20).

However,

a) In regard to method claims, the claimed method language is counter part of the apparatus claimed. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to develop a particular method for the disclosed apparatus of the cited references.

b) The ferrule is made of ferrous alloy.

Official notice is taken that ferrule made of ferrous alloy is well known in the art, therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for Hashizume to have ferrule made of ferrous alloy.

11. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashizume (5,631,990).

Hashizume discloses all the limitations of claim 37, as shown above,

However, Hashizume does not disclose:

- a) The ferrule is made of ferrous alloy.

Official notice is taken that ferrule made of ferrous alloy is well known in the art, therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for Hashizume to have ferrule made of ferrous alloy.

12. Claims 16 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashizume (5,631,990) in view of Gordon et al (4,752,109).

Hashizume discloses all the limitations of claims 14 and 37, as shown above,

However, Hashizume does not disclose,

- a) The ferrule is mounted in the bushing through a solder joint. Gordon et al discloses a solder joint (50, 53, also see col: 7, lines 1+), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for Hashizume to have the ferrule to be mounted in the bushing through a solder joint in view of Gordon et al in order to have better connection.

13. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashizume (5,631,990) in view of Paschke et al (4,904,046).

Hashizume discloses all the limitations of claim 37, as shown above,

However, Hashizume does not disclose,

- a) The ferrule is mounted in the bushing through a glass sealing process.

Paschke et al discloses a glass soldering (see abstract), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the

invention for Hashizume to have the ferrule to be mounted in the bushing through a glass sealing process in view of Paschke et al in order to have better connection.

14. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (4,752,109), in view of Hashizume (5,631,990).

Gordon et al discloses all the limitations of claims 26 and 34, as shown above,

However, Gordon et al does not disclose,

- a) The bushing is mounted in the housing using laser welding. Hashizume disclose laser welding (see col.3, lines 8-20), therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for Gordon et al to have the bushing to be mounted in the housing using laser welding in view of Hashizume for better connections.

Allowable Subject Matter

15. Claims 5-9, 17-21, 29-33 and 41-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

REASONS FOR ALLOWANCE

16. The following is an examiner's statement of reasons for allowance:

The reason for allowance of the claims is the inclusion of the limitation,

- a) For claims 5, 17, 29 and 41, none of the prior art teaches or suggest, alone or in combination the first and second sections of the transition bushing have different coefficients of thermal expansion, in combination with other limitations in the claim which is not found in the prior art reference of record.
- b) For claims 6, 18, 30 and 42, none of the prior art teaches or suggest, alone or in combination the coefficient of thermal expansion of a section of the transition bushing is matched to the coefficient of thermal expansion of a housing for attachment to the transition bushing, in combination with other limitations in the claim which is not found in the prior art reference of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javaid Nasri whose telephone number is 571 272 2095. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any correspondence to this action may be mailed to:

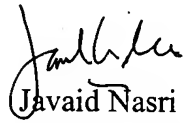
**Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450**

For additional information regarding this new address, which was effective May 1, 2003, see *Correspondence with the United States Patent and Trademark Office, 68 Fed. Reg. 14332 (March 25, 2003)*.

Or faxed to: 703-308-7722 or 308-7724 (informal or draft communications should be clearly labeled "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

**Crystal Plaza 4, Fourth Floor (receptionist)
2201 South Clark Place, Arlington, Virginia**


Javaid Nasri
Primary Examiner
Art Unit 2839

JN

jhn

May 18, 2004